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soil conservation

DEVOTED TO THE WISE USE OF LAND AND WATER RESOURCES

MULTICOUNTY COMMUNITY DEVELOPMENT

Resource development districts — A council of district governments — A multicounty watershed project

A city's farm for resource learning — **Initiative by a county government**

SOIL CONSERVATION SERVICE — U. S. DEPARTMENT OF AGRICULTURE

COVER: Melting snow in the mountains holds at once the promise of life and the threat of destruction to people in the valleys below. This scene is near Ketchum, Idaho.

Boundaries . . .

Conservationists and community leaders are finding that manmade boundaries can be bridged in economic development with beneficial results as impressive as in land treatment.

From among a growing number of examples of multicounty action, we report this month on two that successfully surmount a multiplicity of local governmental units and land ownership types.

In both the Wood River Area of Idaho (p. 267) and the Pecos Valley of New Mexico (p. 272), conservation districts, counties, muncipalities, public land agencies, and private landowners have formed "resource development districts" to channel their efforts toward common goals.

In so doing, they extended to economic and social action a principle basic to conservation districts and watershed projects—that land-resource problems follow natural, not manmade, boundaries.

Self-help: Local leaders are learnings, too, that they can apply with their own resources the methods that have succeeded in projects aided by federal funds and guidance.

Albemarle County, Va., for example (p. 270), after learning the ways and rewards of a small watershed project, moved ahead on others without benefit of PL 566.

And the people of Wood River and Pecos Valley areas patterned their operations after federally supported RC&D projects without being designated as such.

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Irrigation farmers in the valleys prepare their land to husband water from the mountains in the background.

Multicounty planning

Four Idaho districts find mutual bond in resource problems

By R. Neil Sampson
Resource planning specialist, SCS, Boise, Idaho

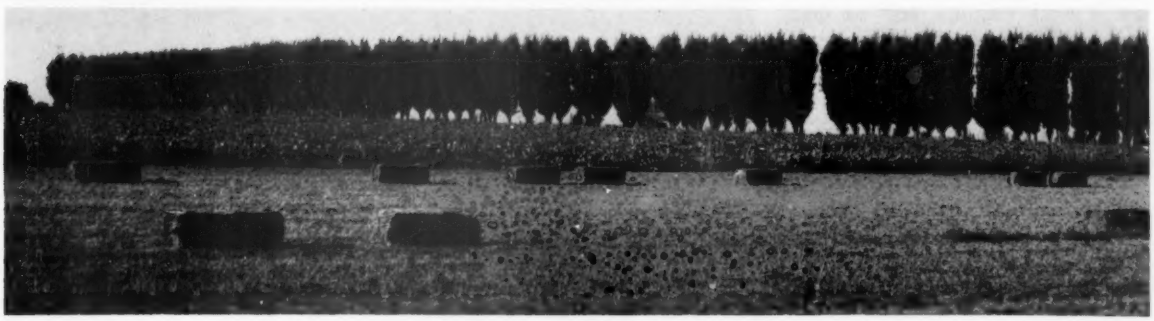
Local resource development ideas have become regional in scope in the Wood River Resource Area of south-central Idaho since the beginning of the multicounty planning effort there.

Four soil conservation districts and the counties that compose them have banded together to deal with their mutual resource problems. Don Fredericksen of Gooding, chairman of the organization's steering committee, cites a recent application to the State Department of Reclamation for priority approval to start planning on a local watershed project as an example of the regional approach.

"We had a delegation of more than 20 people representing widely varied interests from all four counties to present the case for the East Fork of the Big Wood River Project," he notes. "Ten years ago, the people of the watershed and the town of Hailey would have been on their own, but today they have regional support."

Fredericksen, who has served as chairman for the Gooding Soil Conservation District for many years, says the regional planning concept was started almost by accident.

"In 1966, the four district boards met jointly with the Soil Conservation Service to try to achieve a better balance of engineering assistance in the area. During the meeting, we not only worked out this situation but discovered how closely related most of our other resource problems were. It became apparent that we could do a lot more working together than we



Irrigated crops are principal basis of the economy of the Wood River Area.

could accomplish all alone."

As a result of this meeting, the four boards agreed that they would begin meeting regularly to discuss mutual concerns. Lacking legal responsibility and finances to deal effectively with their problems, the supervisors turned to the county commissioners of the four counties for their participation in the joint effort.

Idaho has no legislation authorizing multicounty planning areas, so there was no support available from state or federal funds. The county commissioners supported the idea wholeheartedly, and the Wood River Resource Area was formed with a steering committee composed of two conservation district supervisors from each district and one commissioner from each county.

The region is one of contrast, stretching from the wild, mountainous background of Idaho's famed Sun Valley resort area to the arid desert land on the Snake River plain. The Big and Little Wood rivers spring up in the mountains and travel through the entire region, forming a common resource link. Water stored in the mountain snowpack feeds these streams throughout the summer to irrigate the productive desert soils in the lower country. Along with contrast, however, the region also has many common problems.

Livestock production dominates the agriculture of the region, with most of the summer grazing located in Blaine and Camas counties and the bulk of the winter feed grown on the irrigated plains of Lincoln and Gooding counties. Water to irrigate the low country comes from Blaine and Camas counties and so does water that causes flooding somewhere in the region almost every year.

Recreation and tourism dominate the Hailey-Sun Valley area in Blaine County, but tourists pass through the other counties on their way in and out, creating regional needs for road systems, and region-wide opportunities for tourist attractions.

District supervisors and county commissioners make up the steering committee. Standing, left to right, are Glen Sorensen, Lincoln County commissioner; Dwight Osborne, Camas District supervisor; Bob Bolte, Gooding District supervisor; Don Fredericksen, Gooding District supervisor and steering committee chairman; Keith Justensen and Gordon Drage, Blaine District supervisors. Seated, Corwin Silva, Wood River District supervisor; Ben Clauner and Clyde Peterson, Gooding County commissioners; Lon Baldwin, Camas County commissioner; and Bill Hawkes, Gooding District supervisor.

Gooding County was the first to feel a need for comprehensive planning. The small town of Wendell made application to Farmers Home Administration for a sewer and water loan. FHA requested that this project be made part of an overall sewer and water plan for the county, so a planning effort was started under the chairmanship of Clyde Peterson, Gooding businessman.

The county commissioners realized the need to study more than sewer and water needs in the planning effort. They established 10 committees to consider different segments of the county's resources and report back to the commission. These committees included scores of local people, getting a wide spectrum of community interests directly involved in the planning job. Three conservation district supervisors, two city mayors, four local businessmen, and a state legislator made up the original chairmanship roster.

Planning efforts were organized as suggested by *Guidelines for County and Multicounty Planning*, published by the R. N. Irving Chapter (Idaho) of the Soil Conservation Society of America. The committees studied agricultural, mineral, range, and water resources; public and semipublic improvements; economic base; people and population; government and finance; and recreation and wildlife.

"The importance of finding interested, civic-minded people to work on these committees cannot be stressed too strongly," Peterson says. "There is a tremendous amount of information to be uncovered and assembled before any decision making can begin."

In Gooding County, he noted, much of the information was found to be readily available through local records, state and federal agencies, and the like, but the big job was locating and organizing it.

"One of our first needs was information about soils, to base land use decisions upon," he relates. "The old soil survey was inadequate, but through the cooperation of the Gooding Soil Conservation District and the Soil Conservation Service, a soil scientist developed general soil information that was useful for our

purpose." This included a general soil map of the area and interpretive maps showing both potentials and limitations for using the soils for various purposes. Similar effort from the Farmers Home Administration, Agricultural Stabilization and Conservation Service, Bureau of Land Management, Extension Service, and the State Health Department resulted in assembling a total picture of the human and natural resources of the county.

As the planning study progressed, the committees soon realized that many of the major problems, such as flood control, water conservation, and transportation facilities, involved more than the one county. Using the organization of the Wood River Resources Area, they proposed the idea of multicounty planning to coordinate efforts on regional problems. Acceptance of the multicounty planning concept by the steering committee was immediate.

Today, individual county plans are rapidly nearing completion in all four counties. Planning work has been coordinated so that all resource data, maps, etc., match on the county boundaries. The WRRA has established a planning committee under the steering committee to correlate and combine these efforts into an overall resource plan for the multicounty area.

What about the results of the planning to date and plans for the future? Clyde Peterson, recently elected Gooding county commissioner, says, "We've got the people thinking about the problems, how they might be solved, and recognizing some of the potential benefits to the area. We have seen some solid accomplishments which have given the people a spirit of optimism and confidence that they can solve many problems through joint effort. Perhaps most important, though, has been the dissolution of the old provincialism between the towns and counties of the region. We're working in unison perhaps for the first time in the region."

The steering committee has decided to apply for a Resource Conservation and Development Project. "This approach may provide us with the vehicle we need to accelerate our work," Fredericksen says. "At present we are still a loose organization without real legal status as a multicounty body, but we feel we have the organization and the planning background to move into a Resource Conservation and Development Project very rapidly as much of the basic work is nearly complete."

"Our biggest job at the moment," he states, "is to get broader understanding of our planning work and development potential by all the citizens of the area. With the involvement of the district supervisors, commissioners, city officials, planning commission members and committees, and the Technical Action Panels from each county, we have a lot of people in the act right now. But we must keep all the people informed and involved so that we can move forward on the broadest possible base of local support." ♦

High-producing irrigated pasture supports high-producing dairy herd in the Wood River Valley.

Recreation area in the Upper Mississippi Region

A joint study that could lead to designation of a national recreation area in the Upper Mississippi River region, a 660-mile stretch of the river and adjoining bluff areas in the States of Minnesota, Wisconsin, Iowa, Illinois, and Missouri, is planned and will be completed in late 1970.

The U. S. Army Corps of Engineers and the Bureau of Outdoor Recreation, National Park Service, and Bureau of Sport Fisheries and Wildlife of the Department of the Interior will participate. Other Federal agencies and state and local governments will be asked to take part in the study.

Within the study area are 28 Corps of Engineers navigation pools with a water surface of 390,750 acres. Also included are the Upper Mississippi River Wildlife and Fish Refuge and the Mark Twain National Wildlife Refuge with a combined area of 224,693 acres. About 33 million people live within 250 miles of the study area ♦

A county's own program for resource development

Virginia's historic Albemarle County liked its first watershed project and used it as a pattern for planned industrial growth

By Robert O. Anderson
District conservationist, SCS, Charlottesville, Va.

Thirty-five years ago, Albemarle County, Va., might not have appealed to a developer as a location to build homes or to a manufacturer as a place to establish a plant.

Its rolling farmlands were so badly eroded that the Ivy Creek watershed was chosen as the location for the second soil erosion control demonstration project in Virginia when the Soil Conservation Service was established in 1935. Local builders then used sand washed from the hills and deposited in the creek as a source of supply.

Since the late fifties, the story has been different. New homes and industrial plants have been established at a rapid rate. The county claims to be the fifth fastest growing area in the state. This has brought new demands on local government and people, which, by and large, are being well met by good planning and zoning.

The county administration and planning staff, working closely with the Thomas Jefferson Soil and Water Conservation District, have assisted industries in obtaining land, water, and other resources. They have financed developments in advance of growth. Realizing that urban and industrial expansion is inevitable, they are making sure that it is accomplished in an orderly fashion. Farmers, cooperating with the conservation district, have been glad to establish practices that reduce erosion, beautify the rolling hills, and make their own enterprises more efficient.

The conversion had its beginnings in the erosion control demonstration and really got underway with the Beaver Creek Watershed Project in the early sixties. In the meantime, conservation practices established on the Ivy Creek watershed had cut off the builders' supply of sand from the creek.

Beaver Creek was one of the first projects in Virginia to be completed under Public Law 566. Its success set a pattern for further resource planning and development for the entire county.

A multiple-purpose watershed project, it included a 104-acre lake storing 750 million gallons of good quality water for public water supply and recreation in addition to providing flood prevention.

The county government sponsored the watershed project. It bought the land needed for flood

Beaver Creek Lake is constantly the object of local pride in Virginia's Albemarle County. The development inspired a conservation plan for the whole county.

These two plants, employing 2,400 people, are the largest customers of the county water system. The water comes from the Beaver Creek Watershed Project.

prevention and additional land for recreation use. The county shared 41 percent of the cost of the multipurpose dam and built a $536,760 filtration plant with 8,000 feet of pipeline. As a final item the county fenced the lake and recreation area at a cost of $14,000.

Since then things have been happening.

A watershed study

The success of the Beaver Creek Project prompted the county government to consider further such developments. First, the county board of supervisors asked the Thomas Jefferson Soil and Water Conservation District for a complete study of the water and related land resources of the county. Soil Conservation Service people assigned to the district obtained Geological Survey topographic maps and outlined watershed boundaries and located potential damsites.

Preliminary data were developed, storage curves plotted, lake sizes measured, earthmoving estimated, and costs figured.

Information on the soil resources of the county was carefully gathered.

The county board studied the report, liked the picture it presented, and asked the Virginia Soil and Water Conservation Commission for help on a plan for developing county resources.

Action on their own

Area leaders and other interested citizens heard the plan explained and indicated approval. The county board then set up priorities for the watersheds where water need and the history of flood damages made action urgent.

Quickly, local enthusiasm for action on their own came from area citizens. Success of the Beaver Creek Project was a factor in the decision to go ahead with the overall plan.

The Earlysville Multiple Purpose Reservoir was the first project to follow. For it the county employed a private engineer, had surveys made, and obtained easements on land to be temporarily flooded. It paid $64,909 for land that would be permanently flooded and for additional land for recreation. The earthfill dam cost $297,574. A 51-acre lake storing 333,824,000 gallons of water became a reality.

The Virginia Department of Game and Inland Fisheries stocked the lake in 1967. The development will be used for flood prevention and recreation until needed for public water supply.

Development of the Totier Creek Multiple-Purpose Reservoir is underway. A filtration plant has been built, and the county is ready to start building the dam. The lake will supply water for the town of Scottsville and for the U.S. Rubber Company plant there. It will provide recreation for the residents of the Scottsville area.

The Priddy Creek Multiple-Purpose Project also is in progress. The county paid $95,000 for 565 acres. The project will include a 200-acre lake with over a billion gallons of water for flood prevention, water supply, and recreation.

One of the most desirable Multiple-Purpose Reservoir sites for water storage is in the Buck Island Creek, and the surrounding area is considered ideal for recreation uses. The county means to make full use of this potential and will buy the land as soon as finances will permit. The need for public water supply from this source is not urgent now.

People and markets

James B. Murray, general manager of Murray Manufacturing Corporation in Earlysville, explained why his firm chose Albemarle County for a location:

"Availability of good people and proximity to growing markets were among the reasons. With that decision, we went into the rural northwest part of the county, as close as possible to the labor supply. Many of our employees have been able to continue operation of small farms near their work, an avocation that goes a long way toward combating the boredom found in many factory jobs. We feel we have made an important contribution to the economy of this area."

Thomas M. Batchelor, county ex-

ecutor of Albemarle, gave his analysis of factors involved in the county's progress.

"We were fortunate in having leaders who recognized our fast growth and decided to plan for it. Our county's rich historical background, having the University of Virginia located within its boundaries, is attractive to many businesses and industries. The climate and the beauty of this area attracted many people to make their homes here. When the need for planning became evident, the Thomas Jefferson Soil and Water Conservation District asked the Soil Conservation Service for help in identifying the natural resources that could be developed for our further growth. The county has backed up our planning with appropriations on a continuing basis, realizing that planned development will enable us to control the direction of our growth."

The two industries using the most water from the new supplies are Morton's Frozen Foods and Acme Visible Records, Inc. Jointly they have more than 2,400 employees. Morton's, the largest water user, buys more than 175 million gallons a year from the county.

Thinking back to the Beaver Creek Project, a starting point, Board Chairman Edgar N. Garnett of Albemarle County summed up that achievement in this way:

"Beaver Creek is a real bargain for the county. It's like a vault built to conserve and to protect the valuable resources of our area." ♦

Prescription for self-help...

Pecos Valley conservation districts find there's a will and a way

By William H. Atkinson
Resource conservationist, SCS, Roswell, N. Mex.

Along a 150-mile stretch of the Pecos River Valley in New Mexico you find all the excitement and expectation that go with an area's all-out drive to yank itself from its economic sandtrap.

All the marks and trappings of the usual federally supported resource-development projects are in evidence. All, that is, except the authorized federal financial help.

The people of the Pecos Valley —including all of Eddy County, most of Chaves County, and portions of Lincoln and Otero counties —decided not to wait for the Federal Government to lend its helping hand. There was too much they could do without waiting.

Leadership—an essential ingredient for any such effort—was there in abundance. The six soil and water conservation districts serving the area (Macho, Roswell, Hagerman-Dexter, Central Valley, Penasco, and Carlsbad) promptly agreed to combine their energies and resources for action. Inventorying resources, identifying opportunity, developing a plan, marshaling forces—this was their kind of game.

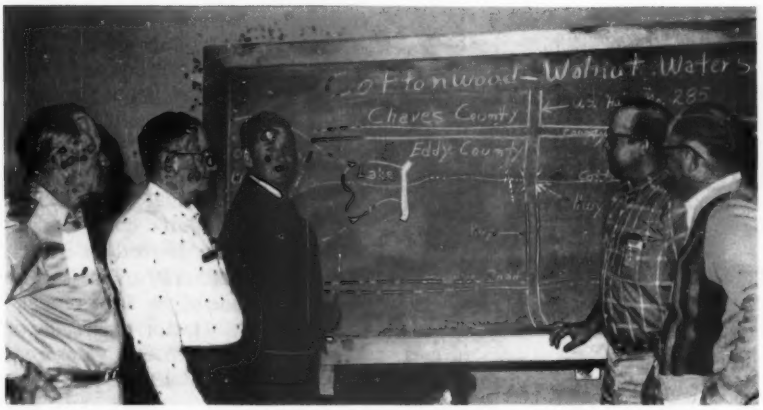
The gathering of citizens for organization was on September 21, 1967, at the invitation of Oral C. Nichols, zone chairman for the New Mexico Association of Soil and Water Conservation Districts. Participants decided on "Pecos Valley Resource Development District" (PVRDD) for a name.

Chairman Kenneth U. Eakens of the newly formed district explained that if they had waited to get into action, 49 going measures for local improvement—expected eventually to involve $33,713,250 and 865 man-years of work—could all still be in the idea stage.

They decided they could match the steps taken by the leaders of similar projects in New Mexico and other states, Eakens said. "The guidelines for Resource Conservation and Development projects have worked elsewhere, and we reasoned they would work for us," he added.

Eight major land ownerships or

Floodwaters at Cottonwood and Walnut Creek crossings come from drainage area in three conservation districts and two counties. That's why the districts decided to join forces in PVRDD.



Floods, that respect no property or fiscal boundaries, were in the thoughts of the group of leaders talking plans for the Cottonwood-Walnut Watershed Project. From left, they are J. J. Terry, director of the watershed district; Chairman Johnny Bowman of the Eddy County commissioners; Chairman Kenneth U. Eakens of the Pecos Valley Resource Development District; Chairman Don Menefee of the Central Valley Soil and Water Conservation District; and Rosco Fletcher, Chaves County commissioner.

administering agencies were in the valley: Private ownership; New Mexico; the U.S. Department of Interior's Bureau of Land Management, National Park Service, Bureau of Reclamation, and Fish and Wildlife Service; U.S. Department of Defense; and the U.S. Department of Agriculture's Forest Service. Each ownership, with separate boundaries, was carrying on work within those boundaries.

With the organization of the PVRDD, land ownership boundaries vanished for practical purposes. Each agency had a representative on the district steering committee.

"With the free flow of information and coordination it is like a relay race," Eakens said. "One participant hands a project to another and it continues across all boundaries."

Water and watershed improvement were among urgent needs in the new district. Other needs and opportunities involved industrial development, recreation, tourism, job training, roads and highways, land use planning and zoning, water and air pollution abatement, processing and marketing facilities, and faster application of soil and water conservation.

Of the 49 projects which the district steering committee chose as objectives, seven have been completed. Others are moving rapidly ahead.

The New Mexco Interstate Stream Commission provided $156,423 for work in the Eagle Eddy County Flood District. A loan of $227,000 came from the Farmers Home Administration for a new water system for the Atoka Community. Individuals and merchants donated $2,450 to beautify highway medians in Roswell.

Conservation of irrigation water has been one of the most urgently needed improvements in the district. More than 60,000 acres of irrigation water management has been accomplished according to conservation standards since the district was formed, raising the new total of this conservation practice to 105,183 acres.

"It is hard to place a total value on a project such as this because water is so precious in our area," Eakens commented.

Cooperation has come from varied sources. The county commissioners, the agencies, and the various organizations have been eager to help. The Soil Conservation Service provided a full-time resource conservationist. Newspapers, radio, and television stations all helped.

This area has actively supported seven applications for assistance under the Small Watershed Program, Public Law 566. In response to the Eagle-Tumbleweed Draw watershed application the Eddy County commissioners authorized formation of the Eagle Eddy County Flood Control District. In the Hackberry Draw watershed, which is now complete, the Eddy County Commissioners resurfaced a county road at a cost of $16,000.

The city of Artesia, one of the sponsors of the Eagle Draw watershed, has assumed operations and maintenance responsibility for a part of the Cottonwood-Walnut Creeks watershed. In these projects easements, operations, and maintenance work by the city have a value of about $100,000. Plans for improvement are being prepared on both of these watersheds.

Of the remaining four applications, the sponsors have completed all improvements in Zuber Draw watershed. Planned structures in Cass Draw watershed are under construction and Avalon-Alacran watershed has been authorized for operations, while North Spring River application remains unserviced.

The state legislature has obligated $400,000 for recreational development in the Cottonwood-Walnut watershed. The New Mexico State Park and Recreation Commission will take over operation and maintenance of the development.

The New Mexico Department of Game and Fish contributed $200,000 to develop the game and fish phases of the recreation park.

The Pecos Valley Resource Development District is proof that multicounty planning and cooperation can open the way to get things done if willingness is there. ♦

California districts join to cope with change

By Thomas W. Holmes and Arthur W. Emerson
District conservationist, SCS, and executive secretary, Council of Bay Area Soil Conservation Districts, Concord, Calif.

How do you assure good resource care in an area of 4½ million residents that will add nearly 3 million more residents in the next 20 years?

Coping with rapid land use changes and pressures is the aim of the Council of Bay Area Soil Conservation Districts formed last March by the 18 districts that border San Francisco Bay in California.

The council, made up of one director from each of the 18 districts, has adopted an annual work plan and a set of long-range plans and objectives. The long-range program says in part:

"The Bay Area is richly endowed with natural resources such as prime agricultural land, water, a Mediterranean climate, striking seashores, access to inland areas through the Bay, a landscape rich in esthetic beauty, a natural habitat for an abundance of wildlife, and a unique fishery.

"Rapid urban and industrial growth over the past and the predicted future has placed heavy demands on these existing resources. In order to assure that these resources are conserved, developed, and utilized for the maximum benefit of man, a cross section of all interests, capabilities, needs, desires, and problems must be recognized and accommodated."

The two decades following World War II saw millions of people coming to the 9-county Bay Area. Its population rose from 2 million in 1945 to 4.1 million in 1965. Industries moved in, and hundreds of thousands of houses were built; the trend continues. Few cities or counties have been able to cope with the changes. Pressure on the land has been tremendous, and it has resulted in planning and development activities that were oriented largely to meeting problems of the commercial and urban sectors rather than considering land needs for food production. Even so, agriculture remains a strong part of the area economy, totaling some $1,534,000,000 in 1968. Conservation district programs have contributed materially to keeping agriculture strong. Watershed projects under Public Law 566 have markedly reduced flooding and erosion on farmland and prevented millions of dollars in damages to industrial and urban areas.

A notable exception to urban-oriented planning was the Preliminary Regional Plan for the San Francisco Bay Area published by the Association of Bay Area Governments (ABAG), in November 1966. ABAG solicited comments from all Bay Area agencies including conservation districts.

What role for agriculture?

Thomas S. Vanasek, president of the Contra Costa District, and other district directors were concerned about the role of agriculture in the plan being prepared by ABAG. James Hickey, planning director for ABAG, was invited to explain the plan at a meeting of all Bay Area district directors in May 1966. After the meeting an informal group of directors was formed—with Vanasek as acting chairman—to study the ABAG plan. The directors' comments were formalized and submitted to the association in January 1968.

During the study sessions the need became evident for an organization of districts that would act as the voice for resource conservation. The council was formed in March 1968, under authority of the Public Resources Code of the State of California. Fred L. Hector, a director of the Black Mountain Soil Conservation District, was elected president; three vice presidents and a secretary-treasurer serve with him as an executive committee. The council's board of directors is made up of one director from each of the 18 conservation districts.

The council's published plans are being distributed to all agencies and to many private groups including engineers, soil specialists, contractors, builders, public officials, and others.

To preserve open space

Primary goal of the council is to make a land use study aimed at preserving open space for agriculture and enhancing the environment through conservation of soil, water, and related natural resources.

A second objective is to study existing local ordinances and laws which directly affect agriculture land use and help prepare model ordinances, so that farmers and ranchers in the future would not be forced to comply with laws aimed primarily at subdivision developers.

Another important objective is that of getting acquainted. Conservation districts have always worked with other agencies and districts. All too often, however, the individual district has been bypassed when a broad plan is being considered or implemented, particularly if it extends beyond the individual district boundaries. The council will contact all conservation agencies and organizations and offer or request assistance, as the need dictates, in furthering resource conservation plan-

ning and accomplishments throughout the Bay Area.

Some recent activities include:

The council is seeking funds to further support selection, propagation, and testing of fire-retardant plants at the SCS Pleasanton Plant Materials Center. The council has a pledge of support and cooperation from the East Bay Municipal Utility District to carry out field demonstrations for fire-retardant plants.

The council has passed a resolution later concurred in by the California Association of Soil Conservation Districts at its annual convention to support Contra Costa Soil Conservation District in requesting a study on desalinization plants for San Joaquin Valley drainwaters.

Recognizing the value of public relations and daily attention to the council's affairs, the council has hired a former information officer for the Soil Conservation Service as executive secretary. President Fred Hector has met with SCS State Conservationist Thomas P. Helseth to discuss the possibilities of SCS assistance in technical staffing.

Arrangements are being made for publicity through established news media and educational releases through colleges and the county school systems. Diablo Valley College will print and use the council's long-range program as well as conservation farm plans and soil surveys in the college's natural science courses on conservation.

Dr. William Landis, science coordinator for the Contra Costa County superintendent of schools, has volunteered to assist in the educational phase. Through his efforts, space for a conservation section in the Contra Costa County Library has been arranged.

The council believes that unless the students of today are made aware of their natural environment and what they can and must do to conserve it for future generations, then what is done today is meaningless. And the Bay Area Council is dedicated to meaningful conservation action today and tomorrow. ♦

Multiagency team sponsors 3-county watershed project

By John Bolton and Erwin C. Ford

Watershed planning staff member and economist, SCS, Athens, Ga., and Washington, D. C.

In the South Fork of the Broad River Watershed Project in Georgia's northeast Piedmont section an unusual number of units of government are combining efforts with local citizens to develop the area to its full potential.

Three counties, two soil and water conservation districts, a municipality, and Georgia's highway department are sponsors. The counties are Clark, Madison, and Oglethorpe. Broad River and the Oconee River are the conservation districts, and the city is Lexington.

The 93,000-acre watershed is largely rural. Lexington has a population of around 400; nearby Athens, 42,000. The 825 farms in the area average 140 acres in size.

In developing a plan for their watershed, the sponsors had the help of the Soil Conservation Service and the Forest Service. In public meetings the local citizens took part in the planning process, helping to analyze costs, benefits, and adequacy of each proposal.

The county governments played an important role. The commissioners of the three counties worked closely with SCS engineers, economists, and conservationists. They obtained land rights. They pledged county resources in such work as roadside erosion control, assuming responsibility for altering roads, bridges, and culverts. They promised help as needed to Lexington officials in meeting obligations connected with adding municipal and industrial water to flood-prevention features of the plan.

Federal assistance for the project under Public Law 566 was authorized in September 1965 and work began. The dam on site 64 in Madison County now holds, in addition to its floodwater capacity, 135 acre-feet of water storage for supplemental irrigation. It protects valuable agricultural land as well as four county roads which periodically suffered in times of flooding.

A contract has been let for one of the dams designed for flood prevention, and the letting of contracts for other such structures is expected soon.

The Oglethorpe County Board pledged to Lexington that if the town could not finance completion of a filter plant and distribution system for its new water supply, the county will complete the job.

The Clarke, Madison, and Oglethorpe county boards are cooperating in roadbank stabilization, and the State Highway Department is helping with roadside erosion control and the alteration of fills, bridges, and culverts on state highways.

The dam on site 3 is the one on which the people of Lexington are resting hopes for growth. The 206 acre-feet of water for the town's use will make possible further industrial expansion. The Champion Paper Company, enthusiastic over the outlook, has deeded 67 acres of its land to the town and furnished easements for 99 additional acres.

The final plan for the South Fork of the Broad River Watershed Project represents a vast investment by local interests in effort and time. But with the plan now taking shape on the land, everyone in the watershed would agree that the effort has been sound from whatever standpoint you look at it—business, resource development, protection from floods, or simply making the area a better place to live. ♦

A farm is a fun place for learning

By Richard E. Watkins
District conservationist, SCS, Trotwood, Ohio

For many it's their first visit to a farm.

They are the children who came by the thousands each year to Aullwood Children's Farm on the outskirts of Dayton, Ohio.

Combined with the excitement of an outing and the thrill of seeing and touching real live animals is the wonder of learning about life in the countryside beyond the paved streets.

They come with their teachers, with Scout leaders, with parents, as teenage groups, and even as college classes to this model farm administered by the National Audubon Society as a center of learning about resource conservation.

A gift to conservation

The farm was purchased by Mrs. John Aull, Dayton conservationist, in 1961 and given to the Audubon Society. Immediately it was enrolled as a cooperator with the Montgomery Soil and Water Conservation District. A conservation plan was developed for the property with the assistance of the Soil Conservation Service. This plan detailed the land uses and conservation practices to be established. SCS followed through by providing technical assistance in doing the planned work.

Visitors have the opportunity to see many soil and water conservation practices. A diversion shows how to protect the buildings from water damage, and there is also a field diversion for water control. Contour stripcropping and grassed waterways have been established; living fences and wildlife habitat developed. Tree planting and pasture and hayland management practices are also to be seen.

More than 37,000 children and adults visit the farm each year. Many of the students are from the Dayton and Montgomery County schools, but groups from other schools in a 70-mile radius also enjoy the farm. Boy and Cub Scouts, Girl Scouts and Brownies, Camp Fire Girls and Bluebirds, and other groups ranging from preschool through seniors in college, learn more about conservation here.

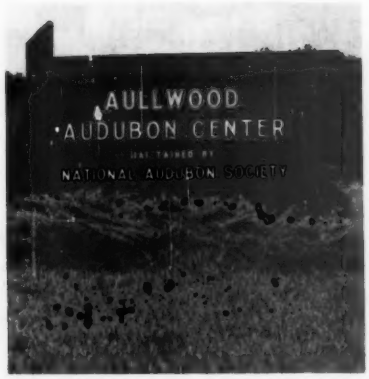
Aullwood Farm has a wide variety of lesson plans available for school classes on subjects ranging from names and uses of farm animals to beekeeping. There are displays and demonstrations on soil and water conservation practices. The SCS and the Montgomery Soil and Water Conservation District have provided bulletins and other educational materials to the farm throughout the years.

Teachers who make reservations in advance are sent preparatory material 2 weeks before they are due to arrive. Making a reservation 6 months to a year in advance assures a teacher that the class will be given a guided tour by trained instructors.

Due to the popularity of Aullwood, many classes have to visit as unguided groups. In this case, the teacher is given a tour guide folder that explains the farming operations and conservation practices. The teacher may then set the pace for the tour and choose the points to be stressed.

An operating farm

Although Aullwood is run as an operating farm, it is not entirely self-supporting. Many individuals and organizations in the Dayton



At left, a group of would-be farm boys study a model of the farmstead they have just toured. Below, an elementary school class makes a new acquaintance in the barnyard.

The Aullwood farmyard (above) is usually busy with touring groups (photo courtesy National Audubon Society). The sheep-shearing demonstrations (below) always draw attention.

One of the farm instructors (with shoulder patch) shows a school group the farm's purebred Shropshire ram.

area have contributed funds for such necessary things as a machine storage building, garage, classroom, a large display area, office space, and various farm implements. The Dayton Board of Education provides funds to help pay the farm instructors' salaries.

Corn, oats, wheat, and hay are the main crops produced at Aullwood. All grain is put in storage at a local feed mill and used as needed for livestock on the farm. The hay and straw are baled and stored for winter use.

Something new was added when the Aullwood Audubon Farm Gardeners were organized. This program is designed for boys and girls 9 to 13 years of age. Classes meet Saturday mornings from April 1 through September 1. Students work in pairs and are given a 12x12-foot garden plot to plant, maintain, and harvest. Each pair of gardeners is responsible for their own plot. Through the guidance of a farm instructor, the gardeners learn the principles of good gardening, proper preparation and care of the soil, seeding, weeding, cultivation, and harvesting methods. The students also learn about garden friends and pests; the importance of good fertile soil and sound conservation practices.

One 11-acre area of the farm is maintained as a school forest. Each spring about 400 fifth grade students from a local school district plant their own Christmas trees, which they will harvest and sell when they are high school seniors. The farm furnishes trees, land, and tools, and shares in the returns.

And special events

Many special events are held at the farm each year. In late winter, "sugar bush days" are held. Then visitors may walk the woods and observe all the steps in making maple sirup.

Sheep shearing is usually in April, with demonstrations of the various steps in making cloth from raw wool. This includes shearing, spinning on an old-fashioned spinning wheel, and weaving on a hand loom. There is a display of how wool cloth is dyed with colors derived from native plants. In 1968, 1,600 people attended sheep shearing day.

A candle-making project in the fall gives families an opportunity to make their own hand-dipped holiday candles from beeswax. Approximately 4,000 people participated in this program in 1968.

A. James Helstern, chairman of the Montgomery Soil and Water Conservation District, says, "This type of conservation education makes learning fun." ♦

Septic system for commercial hog houses

To prevent objectionable odors and insects in commercial hog houses near urban areas, researchers at Purdue University, Lafayette, Ind., designed a septic system that was trouble-free and fully automatic.

Supported by a contract with USDA Agricultural Research Service, Dr. Hope W. Jones, Dr. Richard C. Dobson, and Alvin C. Dale built an experimental hog house. The waste-disposal system collected manure in a pit, piped it through a septic tank, and deposited it in a 40- by 40-foot pond.

The researchers monitored insect buildup closely by installing screens on the hog house and all around the pond and introduced a precounted number of fly larvae into the house and mosquito larvae into the pond as a potential source of insect infestation. Flies in the house died, only an occasional mosquito hatched from the pond, and odors were not objectionable. Even the water looked fairly clean.

Scaled-up versions of the system are now being designed for serving commercial hog houses. ♦

Sorghum brings new hope to Turkish farmers

By S. H. Fuchs and Atif Atilla
Plant materials specialist, SCS, and agronomist, TOPRAKSU, Turkey

Field demonstrations on five farms in the Buyuk Menderes watershed in western Turkey convinced farmers that modern conservation farming and improved varieties of grain sorghum would increase yields, even under the difficult conditions of the Söke plains near the Aegean Sea.

In 1968 the methods installed under the direction of a team of specialists from the Soil Conservation Service more than doubled the yields of grain.

The demonstrations were under the auspices of TOPRAKSU, the Government of Turkey's farm irrigation and soil conservation agency. Technical support was provided under a working agreement arranged through the U.S. Agency for International Development.

A small amount of sorghum has been grown in the Söke plains for many years. It is a variety with white grain that grows to about 6 feet in height and yields little grain.

Continuous cotton has been grown for the past 25 to 30 years. Many of the fields are infected with Fusarium wilt. The crop is usually late, and the winter rains may begin before it is harvested. As a result, yields and quality both are low.

Previously, the plains region was in pasture.

The Söke plains have been built up by deposition of sediment by annual floods. For thousands of years sediment has accumulated at a rate of 1½ to 2 inches a year in the lower reaches of the flood plain. Thousands of acres which were part of the Aegean Sea during Alexander's time are now cropland.

Before planting sorghum, this field was irrigated after land leveling and listing. Farmers in this area had never seen irrigation like this before.

The region is wet in the winter and very dry during spring, summer, and fall. Much of the land is still subject to annual flooding that makes expensive improvements impractical. High water tables and poor drainage add to the problems on many farms. Also, much of the worst-flooded area does not dry out early enough for planting before mid-June or later.

The soils have an extremely slow moisture intake rate because of the high silt content, low organic matter, and poor soil structure. Hardpans have developed. Salinity and alkalinity affect some of the soils.

The usual method of planting sorghum here is to wait until the ground is dry on the surface. About 25 pounds an acre of sorghum seed is broadcast over the field and turned under with a moldboard plow to a depth of 6 to 7 inches. A heavy wooden drag, called a surgu, is pulled over the field to smooth and firm the soil. A disk harrow or cultipacker is sometimes used to break up the clods. If the seeds germinate, the young plants begin to appear in about 2 weeks.

Irrigation is done by hand-built borders forming small basins. Weed control, if any, is done with short-handled hoes. Ordinarily, no fertilizer is used.

Farmers were eager to cooperate with TOPRAKSU on the on-farm demonstrations in 1968. Both win-

The white sorghum field in the Söke plains in Turkey (left) produced only 3,000 pounds an acre. The building (right) was a two-story building 25 years ago. Today the lower floor lies buried in Buyuk Menderes silt.

ter-flooded fields and fields not subject to flooding were selected for the trials.

Several varieties of grain sorghum were obtained from United States seed companies. A lister was developed and used for seedbed preparation on three of the fields. Rows were spaced 3 feet apart and the lister beds dragged down with a surgu just before planting.

A planter was manufactured in a small shop in a nearby village to seed the sorghum at a rate of about 6 pounds an acre in 36-inch rows.

AID Equipment Specialist Marvin Parker developed a cultivator which cut weeds off to within a couple of inches of the sorghum plants. One farmer watching it operate said, "This machine in 1 day will do the work of 100 men with hoes."

Irrigation furrows were made by modified cultivator sweeps. Farmers watching the furrow irrigation on the leveled fields were awed by the siphon tubes, something they have never seen before. They could hardly believe their eyes when they saw a couple of men irrigating with ease. They were used to having a dozen or more men struggling with small basins.

To the amazement of the farmers, good stands developed 5 days after planting.

On other fields, sorghum was planted in narrow-spaced rows. On one farm, following the June harvest of 60 bushels an acre of a Mexican variety of wheat, the straw was plowed under with a moldboard plow and the field bordered and preirrigated. The sorghum was planted on July 1 with a wheat drill with every other drop closed to avoid extremely close-spaced rows. The sorghum was up to a good stand 5 days later.

When the yields were measured, the farmers were impressed. Fields planted the conventional way did not do so well. The very best field of local white sorghum, fertilized with 50 pounds of nitrogen, made 3,000 pounds an acre. One of the United States varieties on the same farm produced up to 7,400 pounds of grain an acre. The demonstration field was planted in 36-inch rows and fertilized with 70 pounds of phosphate and 75 pounds of nitrogen an acre. Tevfik Goktepe, who produced this high yield, said his costs for irrigating were reduced. He irrigated three times.

On Rifki Ozbasli's farm, one variety following wheat, bordered, pre-irrigated, and drilled in 14-inch rows, gave the highest yield of all —8,950 pounds an acre. Another variety in the same field produced 6,000 pounds an acre. The second variety produced 7,400 pounds an acre in 36-inch rows. Rifki used about 35 pounds of phosphate and 75 pounds of nitrogen an acre. He irrigated twice. He chopped out the weeds by hand once. The vigorous variety grew so rapidly that further weed control was not necessary.

Sorghum can be planted as late as July in the Aegean region with certainty that it will mature in the rainy season. This allows two crops, wheat and sorghum, to be grown the same year.

Farmers in the Buyuk Menderes are already figuring other ways to improve their yields. They have found that subsoiling land having a hardpan, more liberal use of fertilizers, and more timely application of irrigation water, are some of the ways to improve production. ♦

Treatment for a waterlogged golf course

The rain was over and the sky was clearing, but there was little relief for Karl Ostberg.

Greens Superintendent Ostberg of the Upper Montclair Country Club in Clifton, N.J., stood looking at the lake that covered much of fairways 1 and 9-east of the 27-hole course. During this wet summer of 1961, the high water was a familiar sight.

Other areas of the 192-acre course were water-covered, too, and in several places the grass was dying because of the constant seepage. Much of green 6-south had disappeared under water from a nearby pond that had overflowed.

At a recent New Jersey Golf Superintendent's meeting, Ostberg remembered talking with a fellow superintendent about his flooding problem. On his suggestion, he contacted the Northeast Jersey Soil Conservation District and soon the Upper Montclair Country Club was a district cooperator, with arrangements for technical assistance from the Soil Conservation Service.

Shortly after, SCS District Conservationist Harold C. Waters stopped to see Ostberg and look at the problem areas. What he saw convinced him that the major problem was with the main ditch intended to drain the flooded areas.

Running about 3,900 feet through the center of the course, the ditch was too narrow and shallow to handle heavy rains. Also, culverts were too small to allow water through fast enough.

Channel improvement—deepening and widening—and replacement of two culverts with wooden foot bridges were suggested. The conservationist also recommended installation of nearly 9,000 feet of 4-inch tile lines under the fairways.

Club directors gave their approval and the work was done. The sides of the ditch were sloped on a 1½ to 1 ratio and seeded with inoculated crownvetch and Kentucky 31 tall fescue. This mixture is effective in controlling bank erosion.

Beginning in 1962, New Jersey experienced 5 years of drought, and it remained for the wet summers of 1967 and 1968 to test the new water-control system. Happily, there was no duplication of the 1961 flooding, and Karl Ostberg expects to keep the golf course open right through future rainy seasons. ♦

From rain . . .

. . . to shine

Greens Mechanic Lee Kowal scratches his head over a rising lake on a rainy day in 1961. To left, the same spot in the summer of 1967.

Conservation in action...

City Boy Scouts learn and do in beautification-conservation project

"Beau-Con," an abbreviation for Beautification-Conservation, is the password for Boy Scouts, Scout leaders, and Scout officials in the Akron, Ohio, area.

Beau-Con was initiated as a program to assist Akron area Boy Scouts in community beautification and soil conservation projects, explains Camp Director Jerry Ashwill.

"I like the program because I can do the work right here in my own neighborhood and my friends know that I helped on the job," said one happy Scout.

Mayors, service directors, park officials, and Soil Conservation Service personnel were pleased when asked to suggest worthwhile projects that Scouts could do to provide community beautification. The SCS district conservationist cooperated in training and working with Scouts and Scout leaders.

A few typical projects were tree planting at Boy Scout Camps Manatoc and Butler; installing erosion-control practices; cleaning river banks and streams in neighborhood communities; and tree thinning and pruning in local parks and on private properties.

In 1968, 145 troops with 2,610 Scouts participated in Beau-Con, to the extent of 14,876 hours of service. They were supervised by 359 leaders.

Present plans are to make Beau-Con a continuing project.—EARL P. CARLTON, *district conservationist, SCS, Cuyahoga Falls, Ohio.* ♦

South Dakota

Joint water system saves money for ranchers

Wilson and Mack Wyly, father and son, have adjoining ranches in South Dakota's Stanley County Soil Conservation District. Both have Forest Service permits to graze their stock on areas of the National Grasslands nearby.

In carrying out complete conservation ranch plans under the Great Plains Conservation Program, they agreed to a Soil Conservation Service suggestion that a single well, with a pipeline system, would supply enough water for both operations. The Forest Service joined in.

Other ranchers in the Stanley and adjoining Hughes soil and water conservation districts became interested in the idea and now are working together to solve their water problems.

The Wylys say the 18-cents-an-acre cost of the water they are using is less than two-thirds of the cost of water had they built dams.—MAXWELL M. FINKE, *district conservationist, SCS, Pierre, S. Dak.*

North Carolina

Conservation farmer likes Ky-31 fescue

Ernest Teague, a long-time conservation farmer and supervisor of the Madison County Soil and Water Conservation District, N.C., is an enthusiastic advocate of Kentucky 31 fescuegrass for forage and erosion control.

He was one of the first farmers in Madison County to try the grass. Now he has 125 acres on his 275-

Scouts in Beau-Con Project get a lesson in tree planting from Camp Manatoc Ranger Andy Berry.

Crossfence and pipeline.

Mr. Teague and his Ky-31 fescue.

Rosenwald school ground after shaping and sodding.

acre beef cattle and tobacco farm near Marshall.

The secret of Teague's success with fescue is the kind of management he gives it. Following his conservation plan, he practices rotation grazing to allow each field to recover after being grazed or mowed. He also applies nitrogen fertilizer after the first cutting of hay.

Teague says one of the most interesting things he has noted about fescue is that cattle gain weight rapidly when grazing a pasture that has gone to seed. They eat the seed heads of the grass which are nearly equal to grain.

Teague served as supervisor of his conservation district from 1956 through 1964.—JULIUS M. BOGGS AND ORMAND C. WILLIAMS, *district conservationists, SCS, Marshall and Ashveville, N.C.*

Nebraska

Range improvement heals wind-erosion areas

Improvement of grass and better distribution of livestock are healing some of the trouble spots on Neale Perrett's sandyland range near Valentine in the Cherry County Conservation District, Nebr.

A large blowout around one of the windmills is almost stabilized. A one-time badly overgrazed area at the south end of one pasture is now producing good forage. Another area that animals seldom grazed before is now properly used.

These changes are the result of range conservation practices in Perrett's Great Plains Conservation plan.

Following a study of range conditions on the 2,500-acre ranch with the aid of the SCS conservationist in 1963, Perrett changed from a cow-calf operation to grazing steers. The rancher and conservationist planned a grazing schedule that provided for moving the steers three times during the grazing season in a rotation pattern.

Five new fences were built to subdivide the pastures, additional wells were installed, and old cropland was seeded to grass.

"I now run more animal units than before, and my range is getting better each year," Perrett says.—W. J. HOLMES, *district conservationist, SCS, Valentine, Nebr.*

Louisiana

Topsoil and grass improve a problem schoolyard

When Rosenwald High School in New Roads, La., was built in 1958 it was constructed on the only site available to the school board at that time—an old lumber yard and garbage dump on the outskirts of town.

The result was somewhat less than satisfactory, but finally the school grounds have been converted into a well-drained playground and athletic field adding a touch of beauty to the community.

Through cooperation with the Upper Delta Soil and Water Conservation District, the school obtained the assistance of the Soil Conservation Service in developing a plan to grade and drain the land.

The local National Guard Unit hauled the soil from a nearby farm. The parish police jury provided labor and equipment to grade and drain the area. In the fall of 1968 it was fertilized and planted to ryegrass. Bermudagrass will be planted to establish a good sod for the playgrounds.—RYAN J. JEANSONNE, *district conservationist, SCS, New Roads, La.*

Arkansas counties participate in RC&D Project

Five rural counties in northern Arkansas will participate in the Ozark Foothills Resource Conservation and Development Project to enable local people to use their own leadership, initiative, and ingenuity in creating new rural enterprises and jobs and speeding conservation work. USDA technical help and financial assistance have been authorized to carry forward the plan.

The Ozark Foothills Project includes Lawrence, Randolph, Sharp, Izard, and Fulton counties. ♦

Modern methods, agency help, make difference

Ten years ago Farmer Arson Victorian never dreamed that the modern changes in agriculture would enable him to operate his farm with such ease and efficiency.

Victorian raises rice and soybeans on his 160-acre farm in Allen Parish, La.

He started farming 23 years ago as a two-thirds share cropper on a leased 40-acre farm, raising cotton and rice. Following his first crop, he bought 60 acres of cropland and 20 acres of cutover woodland. Two years later he purchased another 40-acre tract.

In 1954 he became a cooperator with the Grand Coteau Ridge Soil and Water Conservation District. His first conservation work was a group drainage project in cooperation with his neighbors.

Next he cleared his cutover woodland and leveled his land.

Although land leveling is costly, it is paying off in increased crop yields, Victorian says.

Proper range use and careful grass management are coupled with the cost-share practices.

Victorian says loans from the Federal Land Bank and from the Farmers Home Administration enabled him to buy his land and farm equipment, dig an irrigation well, and construct his irrigation system.

With Soil Conservation Service engineering assistance, Arson Victorian selected a site for his irrigation well, built canals, and applied other needed conservation practices. The Agricultural Stabilization and Conservation Service cost-share payments helped him establish most of the conservation work.

Before he constructed his own irrigation system in 1964, he gave one-fifth of his rice crop as water rent. "My irrigation system will pay for itself in about 10 years," Victorian says. Better water management, better seed, fertilizer, and land preparation helped yields to climb.

At a pause in field leveling operations, SCS Conservationist James Guillory helps Arson Victorian adjust the landplane.

Drainage of cropland has played an important role in his success story. The Bayou Blue Watershed Project recently completed a drainage lateral on his land. Previously, the field was hard to prepare and manage, and equipment often bogged at harvest time. Rice had to be replanted at least once in every 5 years because of excess water.

Victorian uses modern farm equipment—two large tractors, a combine, a landplane, and plows. He plans to buy a soybean planter and a big truck in a year or two.

There are many reasons why Arson Victorian is a successful farmer. Hard work, management, soil and water conservation, and agency help are among them.—JAMES G. GUILLORY, *district conservationist, SCS, Oberlin, La.* ♦

Works in Watersheds

The work in subwatersheds of the 11 authorized river basin flood-control projects and the pilot watershed projects of SCS has been successful not only because of its flood-prevention and watershed protection benefits. It has shown how to handle floodwaters on small watersheds effectively and at low cost. It has served as a training ground for technical personnel. It has served as a proving ground for techniques that are being applied in the Public Law 566 program. ♦

How water feeds some birds

A farm or ranch with a pond, stream, or irrigation ditch supports the birds that feed almost exclusively on flying insects.

Many kinds of winged insects lay their eggs in water, the larvae grow to maturity beneath the surface, and then emerge as adults from the surface. This is why chuck-will's-widows, many flycatchers, gnatcatchers, kingbirds, purple martins, nighthawks, phoebes, swallows, and swifts are universally attracted to places that have running or impounded waters. Waxwings are also avid feeders on the winged insects, but they also feed heavily on fruits.

Even more numerous around bodies of water are the shorebirds, waterfowl, kingfishers, bald eagle, and osprey that find there their water-grown foods.

Water conservation on farms and ranches and in suburban areas supports millions of game and nongame birds.—VERNE E. DAVISON, *biologist, SCS, Portland, Oreg.* ♦

Auxiliary president aids conservation

When Mrs. Hugh Norman, Sr., of Summit, Miss., accepted the position of president of the newly organized Auxiliary of the Mississippi Association of Soil and Water Conservation District Commissioners in December 1965, she claimed little experience at organizing groups or in public speaking.

In the 3½ years of her tenure, the auxiliary has grown to a membership of 120, the second largest in the United States. Mrs. Norman is now vice president of the Southeastern Regional Area Auxiliary and a member of National Executive Committee.

As state president, Mrs. Norman has assisted the seven areas of the state to organize and plan program objectives. She provides guidance to area auxiliaries in planning programs and activities. She has traveled as much as 20,000 miles in 1 year in the interest of conservation, including attendance at regional and national meetings.

She is an active member of the Mississippi Conservation Education Advisory Council and also works at the county level visiting schools to promote conservation education and to distribute conservation materials.

Mrs. Norman was a member of the state committee which planned Soil Stewardship observances in 1968 and 1969. In addition to appearing on radio herself, she visited county radio stations in several counties and arranged for local auxiliary members to give programs.

Mrs. Norman has successfully kindled the interest of a number of women in soil and water conservation. In addition to wives of conservation district commissioners, women from other groups have joined with the auxiliary in working for conservation. Auxiliary members, in turn, meet with such groups as the Women's Cabinet of Public Affairs. At the 1967 fall meeting of the cabinet in Jackson, attended by representatives from some 27 leading women's organizations in the state, the auxiliary was recognized as the group with the largest number of representatives present. ♦

Meetings . . .

Counties look ahead to the seventies

The National Association of Counties will hold its annual conference in Portland, Oreg., July 27–30, and its theme will be "Counties in the Seventies."

The conference program is designed to find ways to map a program to continue and expand the rapid revitalization of counties and to evaluate the impact of social change and technology.

Representing about 3,000 counties in the United States, the association is the leading organization in the field of county government. It is concerned with the development of rural as well as urban areas.

The association's policy statement, "The American County Platform," includes many subjects of interest to USDA, such as natural resources, forest lands, water resources, recreation, open spaces, water and air pollution control, pesticides, county planning, multi-governmental areawide planning and zoning, and regional planning.

"Litter-ally, man stinks!" KAB-2

Rural growth is topic of rural life meeting

The 1969 annual meeting of the American Country Life Association will be held at Stillwater, Okla., July 8–9.

Emphasis of the program is to be on helping state and local leaders understand the dynamics of economic growth and human resource development in local rural America. Attention will be given to multicounty factors and to various aspects of the total community.

The presidential address will be given by Dr. R. J. Hildreth of the Farm Foundation, Chicago.

Great Plains Council on land retirement

Problems related to land retirement, low income, and the location of industry in the Great Plains will be among topics discussed at the meeting of the Great Plains Agricultural Council in Oklahoma City, Okla., July 31-August 1.

Chairman H. O. Kunkel of the council will call the session to order. He is dean and director of the Agricultural Experiment station at College Station, Tex.

Dates and places

July 8–9, American Country Life Association, Stillwater, Okla.
8–10, Izaak Walton League of America, Cincinnati, Ohio.
20–24, Business and Professional Women's Club, St. Louis, Mo.
26–30, American Association of Nurserymen, New York, N.Y.
27–30, National Association of Counties. Portland, Oreg.
31–Aug. 1, Great Plains Agricultural Council, Oklahoma City, Okla.
August
3–6, National Farm and Power Equipment Dealers Association, San Francisco, Calif.
10–13. Soil Conservation Society of America. Ft. Collins, Colo.
17–20. American Agricultural Economics Association, Lexington, Ky.
17–22, American Institute of Biological Sciences. Burlington. Vt.
22–23. The Nature Conservancy, Seattle, Wash.

Review

Christians and the Good Earth. BY VARIOUS AUTHORS. (*1969*). *The Faith-Man-Nature Group, 800 S. Royal St., Alexandria, Va. 22314. 190 pp. $1.25.*

The 17 papers presented at the third annual conference of the Faith-Man-Nature Group held in November 1967 near Warrenton, Va., comprise the first of a projected series of publications by a nonsectarian group of scientists and theologians seeking to explore how the resources of theology can contribute to resource conservation.

The conference was made possible through the cooperation of The Conservation Foundation, the National Council of Churches, and gifts of several individuals. Its subject matter ranged from a history of the Soil Stewardship movement through the politics of conservation and the philosophical and theological positions of the Christian church's outlook toward resources and stewardship.

The role of the Church in conservation is discussed from many aspects in several of the papers. A proposal that the National Council of Churches create within itself a department of conservation to establish the church's position on conservation issues, keep church members informed on the issues of the day, and mobilize public opinion is discussed. The point is made that the Church, in addition to concerning itself with other critical social issues of our time, should approach environmental issues as well. The theme that environmental quality is as much a social and moral issue as poverty or crime in the streets is found throughout the book.

This book will make a valuable addition to many libraries. For the conservationist, it offers many ideas that will challenge, broaden, and strengthen his own philosophy on stewardship. For the minister interested in exploring stewardship concepts with his congregation, it will provide a wealth of material for inclusion in sermons or discussions. —R. NEIL SAMPSON, *resource planning specialist, SCS, Boise, Idaho.*

New publications

Catalog of Federal Domestic Assistance. *1969. Compiled for the Executive Office of the President by the Office of Economic Opportunity. 610 pp.* A description of the Federal Government's domestic programs, specifies major eligibility requirements, tells where to apply, and lists printed materials available. Supersedes *Catalog of Federal Assistance Programs,* 1967.

Wood Decay in Houses, How to Prevent and Control It. BY U. S. FOREST SERVICE. *Rev. 1969. USDA Home and Garden Bull. 73. 17 pp., illus. $0.15.* Supersedes Farmers' Bulletin 1993, *Decay and Termite Damage in Houses.*

Sanitary Landfill: a Bibliography. BY R. L. STEINER AND RENEE KANTZ. *1968. U. S. Dept. Health, Educ., and Welfare, Public Health Service Publ. 1819. 37 pp.*

The Demand and Price Situation for Forest Products 1968-69. BY DWIGHT HAIR AND ALICE H. ULRICH. *1969. USDA Misc. Publ. 1086. 74 pp., charts.* Data of interest in relation to the rising lumber prices.

Conservation Highlights 1968. *1969. USDA Soil Conservation Service. 6 pp. folder.* Digest of the progress report of the Soil Conservation Service for the fiscal year 1968.

The Soil Conservation Service. *1969. USDA Soil Conservation Service SCS-CI-17. 4 pp.* Superseding SCS-CI-3, outlines the functions of the SCS.

Soil surveys

Major County, Oklahoma. BY FERRIS P. ALLGOOD. *1968. 84 pp., illus.; maps 3.17 inches to the mile* (1:20,000). Fieldwork by Ferris P. Allgood, Arlin J. Conradi, Clifford E. Rhoads, and R. D. Brinlee.

Howard County, Texas. BY HERBERT R. STONER, W. D. MITCHELL, K. G. BROCK, H. E. MITCHELL. *1969. 68 pp., illus.; maps 3.17 inches to the mile* (1:20,000).

Genesee County, New York. BY JOHN P. WULFORST, WILLIAM A. WERTZ, AND RICHARD P. LEONARD. *179 pp., illus.; maps 4 inches to the mile (1:15,840).*

AMERICA THE BEAUTIFUL LITHOGRAPHS

America The Beautiful—Massachusetts USDA SOIL CONSERVATION SERVICE
BEEF CATTLE ON IMPROVED PASTURE, BERKSHIRE CONSERVATION DISTRICT

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From the Administrator:

Multicounty land use planning

The rapid growth of this country can be guided to preserve the wholesome qualities of both town and country if urban and rural people join together in community planning.

Citizens are beginning to demand that their elected officials at all levels plan for a future that includes adequate amounts of clean air, wholesome food, and pure water, along with adequate space to live, work, and play in a satisfying environment. Recent sampling of public opinion shows that people are willing to pay more taxes for improving and maintaining the quality of their natural surroundings.

State, county, city, village, and town governments recognize that these basic necessities of the good life do not just happen, but must be planned, programed, financed, and carried out through citizen involvement and support.

For example, the National Association of Counties in its official policy statement, "The American County Platform," says that the responsible use of the Nation's natural resources is an obligation shared by citizens, private enterprise, and government at all levels, and that county governments have a critical role and responsibility for providing local leadership in the wise utilization and conservation of our country's natural resources.

The association recommends that each county, as an integral part of its planning program, include a consideration of its natural resource needs and opportunities, including water, power, forests, minerals, soil, air, open spaces, fish and wildlife, and outdoor recreation resources.

The solutions to land use problems and the opportunities to prevent future land use mistakes do not stop at individual property, town, county, or even state lines. More and more we see counties and cities joining together to work on areawide comprehensive planning. It is national policy that boundaries for planning and development districts helped by the Federal Government should be consistent with established state planning districts and regions, unless there is clear justification for exception.

Decisions that influence the use, development, and care of a given parcel of land are being made by planning commissions, councils of government, and other public bodies farther away from the individual tract of ground. The pattern and intensity of land use is named in the Intergovernmental Cooperation Act of 1968 (Public Law 90-577) as one of the guides needed for governmental policies and actions as a part of comprehensive planning directly related to area needs.

The Soil Conservation Service has—or with proper funding can obtain in cooperation with local soil and water conservation districts—the basic facts relating to land and water resources needed by those who make the land use decisions.

We must be sure that the extent of our available help, such as soil, water, and plant data, interpretations, inventories, technical assistance, and knowledge of the resources of the area being planned, are known to and understood by those local, areawide, and state officials involved in comprehensive planning efforts.

It is not enough simply to furnish the raw soil and water resource data. SCS has a responsibility to help local governments find ways and means of using the data to achieve their land use goals. This may mean helping them use this information as a basis for zoning, for health and sediment-control ordinances, or for building codes which relate directly to the suitability or limitations of the resource base.

Conservation district leaders and SCS personnel are establishing continuous working relations with county and city governments and their elected and appointed boards and commissions charged with these responsibilities. This relationship should help in arriving at wise land use decisions and avoiding the tragedy of rural and urban people being engulfed by each other's land use mistakes.

Kenneth E. Grant

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Windbreaks and cover crops in cotton country

SCS Conservationist Clarence Helms observes 3½-foot bank of sand. At right R. L. Blackwell measures pine seedlings planted in Hebron for wind protection.

Windbreaks and cover crops, commonplace in the Great Plains, are being transplanted to the South Carolina community of Hebron to cope with an increasing wind-erosion problem.

In the mule-and-plow days, Hebron was noted for its fine farming. Six ponds in the community turned water wheels to gin cotton and grind corn.

Mechanized farming and larger fields eliminated the patchwork of woodlands that broke the force of spring winds. More efficient tillage reduced the residues of grasses once left between the cotton rows.

Now most of the ponds are filled with sand. Open drainage ditches, necessary for farming low wet soils, are frequently blocked. Sand piles are prominent along woods edges and roadbanks.

The Marlboro Soil and Water Conservation District supervisors initiated a communitywide windbreak and erosion-control plan. The county agricultural agencies endorsed the idea. At a meeting the Hebron farmers voted unanimously to carry out the plan.

Under the plan some 40,000 pine seedlings were planted in rows along roads and boundary lines of the 3,500-acre area. Nearly all rows were planted at right angles to the prevailing wind. Many farmers planted strips of grain or other close growing crops between the row crops to protect young trees and to further reduce wind-erosion damage. In some fields, crop residues were left to protect the trees.

Each farmer planted his own windbreaks. Renters planted windbreaks for absentee landowners. Pine seedlings were donated by E. D. Pew Timber Company, Canal Wood Corporation, South Carolina Industries, International Paper Company, West Virginia Pulp and Paper Company, and Catawba Paper Company.

Hebron was known for its good crops in the 1920's. When these trees grow big enough to provide protection from the wind, that reputation can be regained by the community.—B. W. ANDERSON, *district conservationist, SCS, Bennettsville, S.C.* ♦

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